

Claims

1. A hand grinder (10), having a grinding sheet (20) that fits over the grinding disk underside (18) and having clamping means (22, 24, 30) for fixing the grinding sheet (20) to the grinding disk (14), the clamping means (22, 24, 30) having clamping bodies (24) that is pressable against the ends (21) of the grinding sheet,

5 wherein the clamping body (24) is rotatably supported about a shaft (28) located substantially vertically above a mounting face (22).

10 2. The hand grinder according to claim 1,
15 wherein the clamping body (24) is designed as an in particular cylindrical roller, and the mounting face (22) is designed as a groove that is cylindrical at least in one portion.

20 3. The hand grinder according to claim 1 or 2,
25 wherein the clamping body (24) has a friction lining, in particular a plastic hose, on its circumference.

30 4. The hand grinder according to one of claims 1 through 3,
 wherein the clamping body (24), on the cylindrical core (25) which in particular is of metal, supports a bent clamping lever (30, 60), in particular such that the contours are flush, in a manner fixed against relative rotation and in captive fashion.

35 5. The hand grinder according to one of the foregoing claims,

 wherein an end, remote from the edge, of the clamping

lever (30) is lockable in its clamping position in an elastically prestressed, in particular overlocking way.

6. The hand grinder according to one of the foregoing
5 claims,

wherein the clamping lever (30) is coupled to the core (30) of the clamping body (24), placed in radial and axial bores.

10 7. The hand grinder according to claim 6,
wherein the clamping body (24) has one clamping lever (30) on each of its axial ends.

15 8. The hand grinder according to claim 6 or 7,
wherein the clamping body (24), particularly on its metal core (25), has radial and axial grooves, into which the clamping lever (30), made particularly of spring wire, is placeable flush with the contour of the metal core (25) and is coupled to the clamping body (24) in a manner fixed
20 against relative rotation by means of the plastic hose (23).

9. The hand grinder according to claim 8,
wherein in the release position of the clamping body (24), there is a slit (46) between the clamping body and the
25 mounting face (22), into which slit the end (21) of the grinding sheet is insertable beneath and/or onto the clamping body (24).

10. The hand grinder according to one of the foregoing
30 claims,

wherein the mounting face (22) is curved, in particular in concave fashion, and extends toward the outermost pivot circle, leading to the shaft (28), of the clamping body (24) in the region near the edge of the grinding disk (14) with a

spacing amounting to several millimeters and intersects the pivot circle in the region remote from the edge.

11. A hand grinder (10), having a grinding sheet (20, 5 200) fitting over the underside (18, 180) of its grinding disk (14, 140), and having clamping means (24, 22, 54, 62) for firmly clamping the grinding sheet (20, 200) to the grinding disk (14, 14), the clamping means (24, 22, 54, 62) having clamping bodies (24, 54, 56, 57) that are pressable 10 against the ends (21, 210) of the grinding sheet,

wherein the clamping body (54, 56, 57) has at least two eccentric cams (56, 57), which in particular are on the order of round teeth and which extend parallel to its shaft (28, 280) and/or to the top (160) of the grinding disk (140) over 15 the width of the clamping body (24, 54), the radius of which eccentric cams relative to the pivot shaft (28) is greater than the spacing between the pivot shaft (28) and the mounting face (22, 62), the latter in particular extending rectilinearly and smoothly.

20 12. The hand grinder (10) according to one of the foregoing claims,

wherein the clamping body (24, 54), and in particular 25 its eccentric cams (56, 57) and/or the mounting face (22, 62) - at least in part - comprise elastically deformable material - adaptable to grinding sheets of various thickness that are to be clamped.

30 13. The hand grinder (10) as generically defined by the preamble to claim 11,

wherein a threshold (64), which in particular is rounded, is located on the front and rear edge (150, 170) of the grinding disk (140) and positions the end (21) of the grinding sheet in floating fashion between the threshold (64)

and the mounting face (62).

14. The hand grinder (10) as generically defined by the preamble to claim 11,

5 wherein the grinding disk (14, 140), between its front and rear edge (15, 17, 150, 170) has an indentation (66) on the top (16, 160), into which indentation the grinding sheet (200) guided above it is pressable, in particular with the end (21) of the grinding sheet fixed, and the indentation is
10 spanned, in particular by elastic means, preferably a leaf spring.

15 15. The hand grinder (10) according to one of the foregoing claims,

15 wherein the elastic means are pressable jointly with the grinding sheet (200) into the indentation by means of the second eccentric cam (57).

20 16. The hand grinder (10) according to one of the foregoing claims,

25 wherein the second eccentric cam (57) forms a rotation stop, past which the clamping body (54) is not rotatable further, and which has a greater radius - measured between the pivot shaft (280) and the end of the eccentric cam (57) - than the first eccentric cam (56).

17. The hand grinder (10) according to one of the foregoing claims,

30 wherein the first eccentric cam (56), in the clamping position of the clamping body (54), is located at least 2 mm in front of and parallel to the vertical extending from the pivot shaft (280) to the mounting face (62), and in the process the eccentric cams (56, 57) are braced, spreading away from one another, on the mounting face (62).